TCSN 天辰尚能

# TC40E(204.8V100Ah)

Rack TC40E(S)
TC40E--without SBMS
TC40E(S)-- with SBMS

Module TC10E -- 51.2V100Ah

## Introduce

The TCSN TC series adopts high-safety LFP cells and features an intelligent BMS independently developed by TCSN. It is safe, reliable, and delivers excellent performance and stability, making it suitable for three-phase UPS backup systems.

The UPS series offers excellent compatibility and can be widely used in critical facilities such as data centers, financial institutions, rail transit, educational institutions, medical systems, large industrial and mining enterprises, and power grid systems, meeting the stringent requirements for power backup and power protection across various scenarios.

## Features

### Hassle-free & Long-lasting

Cycle life > 4000 cycles (1C, 80% DOD)
Design life: 20 years

### Modular design

Simple combination
Quick installation

### Multiple series and parallel

Ease of capacity expansion
Supports series and parallel connections

### Integrated functions

Smart balancing good consistency
Multiple comms options

### Flexible compatibility

Compatible with two-wire
three-wire systems

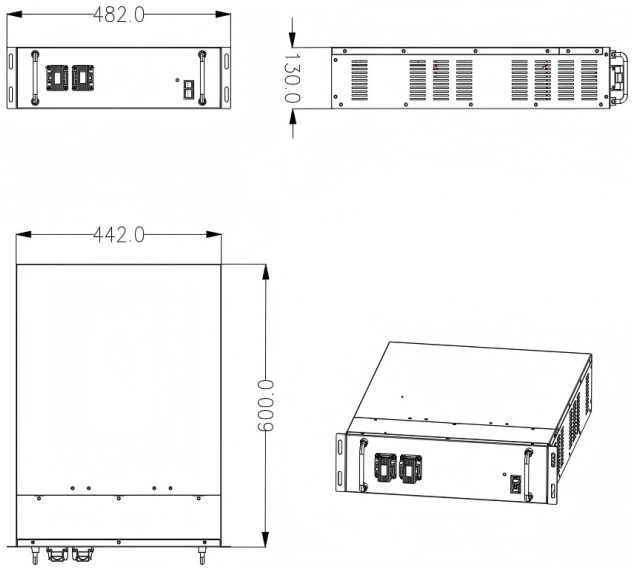
### Visual design

Visual display interface
Easy maintenance

# Performance

| Performance Parameters | |
|---|---|
| Cell | Square LFP |
| Capacity(Ah) | 100 Ah |
| Voltage(V) | 204.8 V |
| Energy(Wh) | 20.48 kWh |
| Rated Charge Current | 50 A |
| Max. Charge Current | 100 A |
| Rated Charge Voltage | 217.6~220.8 V |
| Charge Cut-off Voltage | 230.4 V |
| Balancing Voltage | >217.6V |
| Max Output Power | 39.2 KW |
| Standard Discharge Time | 39.2 KW@30min |
| Rated Discharge Cut-off Voltage | 179.2 V |
| Minimum Discharge Cut-off Voltage | 169.6 V |
| Short-circuit Current | Approx.4500A |
| **General Data** | |
| Terminal | M8 |
| IP Grade | IP21 |
| Self-discharge | <=2%/Month |
| Cycle Life | 4000 times(1C 80% DOD) |
| Weight | 290 Kg |
| Dimensions | 1000*600*1165 mm |
| Storage Temperature | -5℃ to 35℃ |
| Discharge Temperature | -20℃ to 65℃ |
| Charge Temperature | 0℃ to 45℃ |

## Size



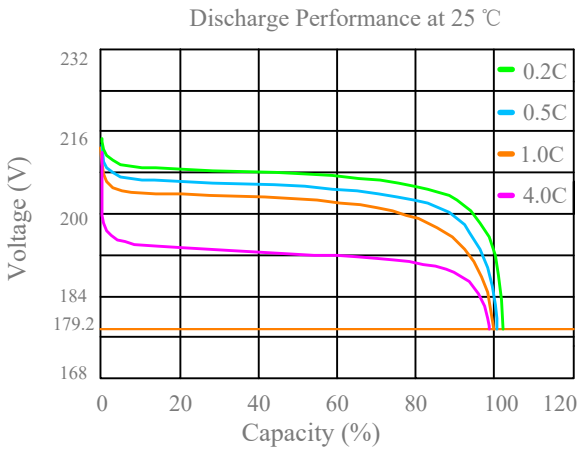

## Compliance

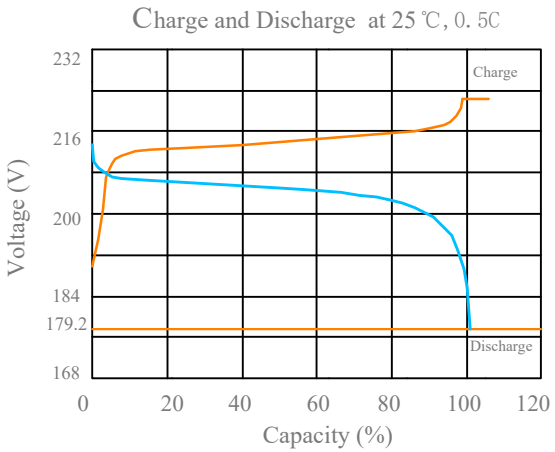
| | |
|---|---|
| Certifications | UN38.3/IEC62619(cell) |
| Transport Appraisal | UN3480,CLASS 9 |

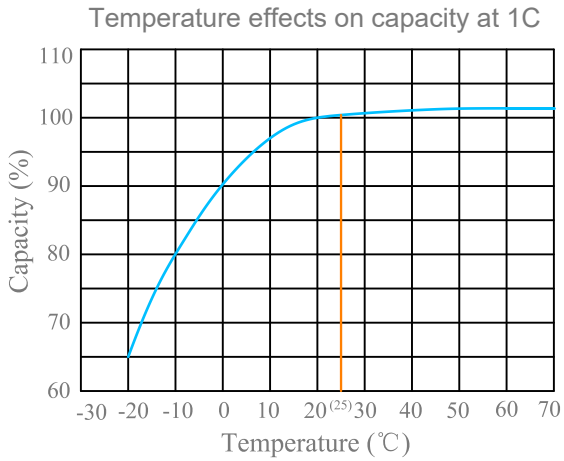
## Peformance Data

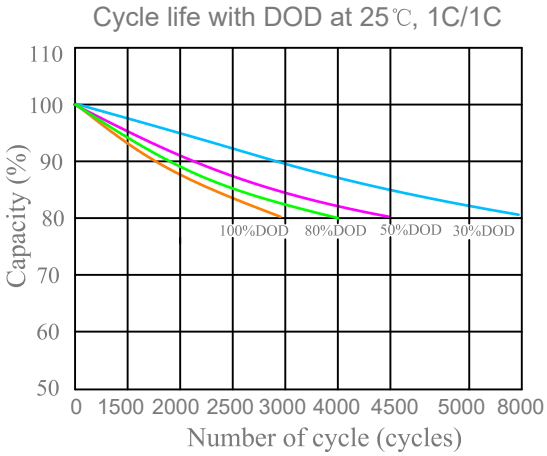
| Time(min) | 30 | 60 | 120 | 180 | 300 |
|---|---|---|---|---|---|
| Constant Power(kw) | 39.2 | 19.6 | 9.8 | 6.5 | 3.7 |
| Constant Current(A) | 200 | 100 | 50 | 33.3 | 20 |

# Characteristics Curve




# Cautions

1. Do NOT short circuit, crush or disassemble.
2. Do NOT heat or incinerate.
3. Do NOT immerse in any liquid.
4. Store at 50% capacity. Recharge every 6 months. The storage area should be clean,cool,dry and ventilated.
5. Disconnect charging source prior to connecting or disconnecting battery terminals.
6. Do NOT dispose of batteries in a fire as they can explode.
7. Do NOT open,alter,or mutilate batteries.Released electrolyte is harmful to skin and eyes. It may be toxic.
8. Do NOT mix different types and brands of lithium-ion batteries.
9. Do NOT dispose in trash,follow local regulations and manufacturer's instruction.
10. See installation instructions before connecting to the supply.
11. The battery cabinet receives power from more than one source. Disconnection of all DC sources is required to De-energize this unit before installing or servicing. Wait 5 minutes before opening the unit.
12. Do NOT install on or over combustible surfaces.
13. Refer to manual before servicing.
14. Do NOT touch bare terminals.